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Form 3160-3 (August 1999)	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT RECEIVED				FORM APPROVED OMB NO. 1004-0136 Expires: November 30, 2000		
	APPLICATION FOR PER	MIT TO DRILL		5	. Lease Serial No. NMNM012698		
la. Type of Work	a. Type of Work DRILL REENTER 2013 SEP - 2 PM 4: 05				6. If Indian, Allotee or Tribe Name		
1b. Type of Well	Oil Well X Gas Well	Other	S S S S S S S S S S S S S S S S S S S	\$ 7	. Unit or CA Agreeme	nt Name and	I No.
2. Name of Operator         / ConocoPhillips Company         3a. Address         3b. Phone No. (include area code)					8. Lease Name and Well No. SJ 29-6 Unit #238A 9. API Well No. 3003927489		
4. Location of Well	64, NBU 3004, Farmingto (Report location clearly and in acco it C, 795' FNL & 1960' <sup>zone</sup> Same as	ordance with any Stat FWL	e equirements)* 0C7 2003		Basin Fruitla Sec., T., R., M., or E. Sec., 1, T29N,	xploratory nd_Coa1 Blk. and Surve	
14. Distance in miles a	and direction from nearest town or p			12	.County or Parish	13. State	
<ol> <li>Distance from pro location to neares property or lease (Also to nearest d)</li> </ol>	oposed* it	<u>miles east of</u>	Aztec NM 16. No. of Acres in lease		io_Arriba, ng Unit dedicated to t 319.49 W		
<ol> <li>18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.</li> </ol>			19. Proposed Depth 3643 '	20.BLM	LM/BIA Bond No. on file ES0085		
21. Elevations (Show whether DF, KDB, RT, GL, etc.			22. Approximate date work will star	1 rt*	23. Estimated duration		
6638' GL			10/1/03	10/1/03 30 days			
		24	. Attachments				
The following, compl	eted in accordance with the requirer	nents of Onshore Oil	and Gas Order No. 1, shall be attache	d to this fo	orm:		
<ol> <li>A Drilling Plan</li> <li>A Surface Use Plan</li> </ol>	d by a registered surveyor. an (if the location is on National Fo led with the appropriate Forest Serv	•	<ol> <li>Bond to cover the operation Item 20 above).</li> <li>Operator certification.</li> <li>Such other site specific in authorized officer.</li> </ol>				,
25. Signuature	2 nac		ame (Printed/Typed)		Date	Date	
Title	by Chi	P P	atsy Clugston		_*	8/27/0	13
	istrative Assistant						
Approved by (Signautre)			ame (Printed/Typed)		Date	30 201	03
Title	13/ David J. Mankiewi	<b>CZ</b> 01	ffice	<u></u>	<u></u>		<u> </u>
conduct operations the		applicant holds legal	or equitable title to those rights in the	he subject	lease which would e	ntitle the app	olicant to
	on 1001 and Title 43 U.S.C. Sectio e, fictitious or fraudulent statements		me for any person knowlingly and v to any matter within its jurisdiction.	villfully to	make to any departi	ment or agen	cy of the

\*(Instructions on Reverse)

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DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS". This action is subject to technical and procedural review pursuant to 43 CFR 3165.8 and appeal pursuant to 43 CFR 3165.4

NMOCD

District I PO Box 1980, Hobbs, NM 88241-1980

District II PO Drawer DD, Artesia, NM 88211-0719 District III

District III 1000 Rio Brazos Rd., Aztec, NM 87410

District IV PO Box 2008, Santa Fe, NM 87504-2088

#### State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised February 21, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

AMENDED REPORT

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088



**BECENED** 

# **CONOCOPHILLIPS COMPANY**

### WELL NAME: San Juan 29-6 Unit #238A

### **DRILLING PROGNOSIS**

- 1. Location of Proposed Well: Unit C (NENW), 795' FNL 7 1960' FWL Section 1, T29N, R6W
- 2. **Unprepared Ground Elevation:** @ 6638'
- 3. The geological name of the surface formation is San Jose.
- Type of drilling tools will be rotary. 4.
- 5. Proposed drilling depth is <u>3643</u>.
- 6. The estimated tops of important geologic markers are as follows:

Base of lowest Coal – 3573'
PC Interval - 3581'
Intermediate casing – 3326'
Total Depth - 3643'

TD includes 62' of sump/rathole & COPC will comply with the BLM/OCD's Conditions of Approval for the proposed sump/rathole in this non-producing Pictured Cliffs Formation.

7. The estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

Water:	<u>Ojo Alamo -</u>	2621' - 2856'
Oil:	e	
Gas:	Fruitland Coal -	3241' – 3573'
Gas & Water:	Fruitland Coal -	3241' - 3573'

8. The proposed casing program is as follows:

> Surface String: <u>9-5/8"</u>, <u>32.3#</u>, <u>H-40</u> @ 200' \* Intermediate String: 7", 20#, J/K-55 @ 3326' Production Liner: <u>5-1/2", 15.5# J/K-55 @</u> 3306' - 3643' (see details below)

\* The surface casing will be set at a minimum of 200', but could be set deeper if required to maintain hole stability.

150.2 sx Class G cement with 2% bwoc CaCl2 (S001), 0.25#/sx 9. Cement Program: Surface String: Cello-Flake (D029) 1.16 cuft/sx yield = 174.27 cf

### San Juan 29-6 Unit #238A

Page 2

### 9. Cement program: (continued from Page 1)

#### Intermediate String:

Lead Cement: 420 sx Class G w/3% D079 (Extender) 0.25#/sx D029 (Cellephone flakes, + 0.2% D046 Flocele (All purpose antifoam agent) mixed at 11.7 ppg and yield of 2.61 cuft/sx = 1097 cf.

**Tail:** 96 sx - 50/50/G/POZ cement w/2% D020 (Bentonite Extender), 2% S001 (CaCl2), 5#/sxD024 (Gilsonite),  $\frac{1}{4}$ #/sx D029 (Celephane flakes) & 2% D046 (all purpose antifoam agent) @ a weight of 13.5 ppg and yield of 1.27 cuft/sx = 122.29 cf.

Note: ConocoPhillips Company continually works to improve the cement slurries on our wells. Our Cementing Service Companies are currently trying to improve what we are using now and before we would use a new cement program it would have to have stronger properties than we are currently using.

Centralizer Program:

Surface:	Total four (4) - 10' above shoe and top of $2^{nd}$ , $3^{rd}$ , & $4^{th}$ jts.
Intermediate:	Total seven (7) - 10' above shoe and top of $1^{st}$ , $2^{nd}$ , $4^{th}$ , $6^{th}$ , $8^{th}$ , $\&$ $1^{st}$ jt. into shoe.
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Turbulators: <u>Total three (3) - one at 1<sup>st</sup> jt below Ojo Alamo and next 2 jts up.</u>

#### <u>Liner :</u>

• A 5  $\frac{1}{2}$  15.5# liner will be run in the open hole without being cemented.

Completion - depending on well conditions the:

- Well will either be cavitated and a 5-1/2" liner will be run without being cemented, or
- Well will be underreamed, tubing will be set and cavitated at a later date.
- 10. The minimum specifications for pressure control equipment which are to be used, a schematic diagram thereof showing sizes, pressure ratings (or) API series and the testing procedure and testing frequency are enclosed within the APD packet.
- 11. Drilling Mud Prognosis: Surface spud mud on surface casing. Intermediate - fresh water w/polymer sweeps. Bentonite as required for viscosity. Below Intermediate - air drilled.

# BLOWOUT PREVENTER ARRANGEMENT & PROGRAM For Drilling to Intermediate Casing Point & Setting 7" Intermediate Casing



This BOP arrangement is for the drilling operations from the time the 9-5/8" surface casing is set through the setting of the 7" intermediate casing. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. The Pipe Rams, Blind Rams, Choke Manifold, and 9-5/8" surface casing will be tested to a low pressure test of 200 psi to 300 psi and to a high pressure test of **1000 psi** (this value is 44% of the minimum internal yield pressure of the 9-5/8" casing). We will drill the 8-3/4" hole to intermediate casing point and run and cement the 7" intermediate casing. Then we will nipple down the BOP, install a trash cap, & move out the drilling rig. We will install the casing spool on the 7" stub after the drilling rig is moved off location. At a later date we will move in the cavitation rig for the cavitation program.

In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

- 1. Upper Kelly cock Valve with handle
- 2. Stab-in TIW valve for all drillstrings in use

# BLOWOUT PREVENTER ARRANGEMENT & PROGRAM For Cavitation Program



This BOP arrangement and test program is for the cavitation program. The BOP will be installed on the tubing head. The 7" casing will be pressure tested against closed blind rams to 200 psi to 300 psi for 2-3 minutes and to 1800 psi for 30 minutes - this test pressure is 48% of the minimum internal yield strength of 3740 psi for the 7", 20#, J-55, STC casing. The pipe rams and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 2-3 minutes and to 1800 psi (high pressure test) for 10 minutes - This test will be done with a test plug or possibly without a test plug (ie against casing). If we conduct this test without a test plug we will ensure that we have sufficient drillstring weight in the hole to exceed the upward force generated by the test.

We use a power swivel and air/mist to drill the 6-1/4" hole in our cavitation program. We do not use a kelly. In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

- 1. String floats will be used inside the drillpipe
- 2. Stab-in TIW valve for all drillstrings in use
- 3. Each blooie line is equipped with a hydraulically controlled valve (HCR valve).

# San Juan 29-6 Unit #238A NM-NM012698 – Unit C, 795' FNL & 1960' FWL Section 1, T29N, R6W; Rio Arriba County, NM

#### **Cathodic Protection**

ConocoPhillips proposes to drill a cathodic protection deep well groundbed for the subject well. Will drill a 6-7/8" hole to an anticipated minimum depth of 300' (maximum depth of 500'). Cement plugs will not be used unless more than one water zone is encountered. Prior drilling history for the area indicates only one zone to that depth. If more than one water zone is encountered, notification will be made and details of cement and casing will be provided.

All drilling activity will remain on existing well pad and a Farmington based company will be doing the drilling for ConocoPhillips.

See attached drawing on proposed placement of groundbed & underground AC & DC cables and rectifier.